

# CRYSTAL



## Seamless Life-Cycle Collaboration for Safety-Critical Systems Engineering

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# Today's situation at industrial companies



**AEROSPACE**



**AUTOMOTIVE**



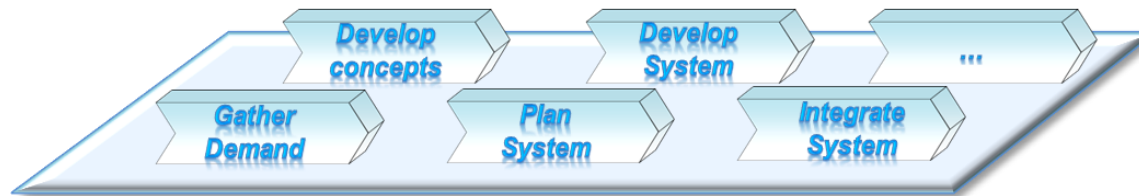
**HEALTH CARE**



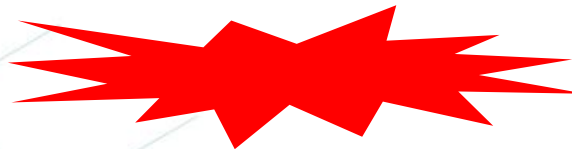
**RAILWAY**



**Industrial Workflows**



- **Fragmented IT**
- **High maintenance costs**



- **High manual effort to handle data**
- **Impact on quality and safety**



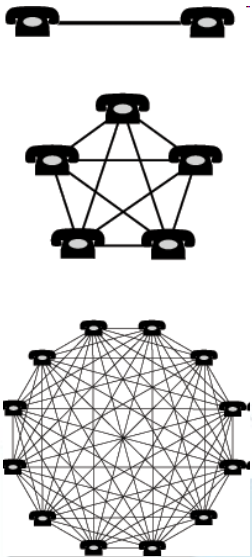
**Tool Layer**



# The tool-integration problem



Point-to-point  
Integrations  
don't scale



Creating new  
integrations is  
unpredictable

Monocultures  
lock you in



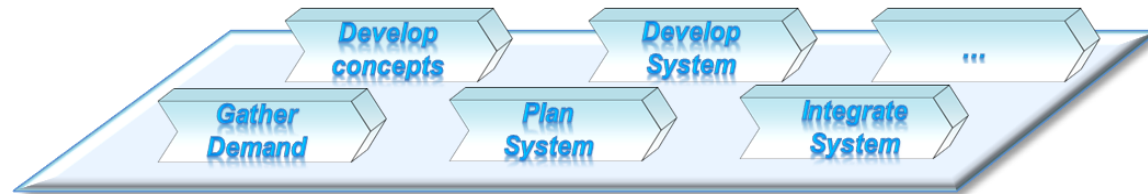
Past choices  
restrict present  
action and  
future vision

Maintenance, management,  
and change costs go up over time

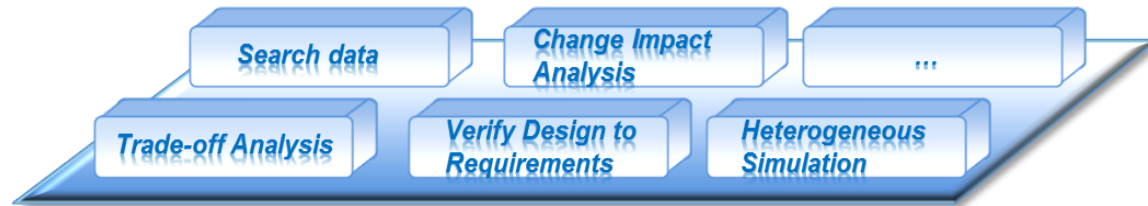


Ongoing and unexpected  
costs drain resources

# The CRYSTAL Vision

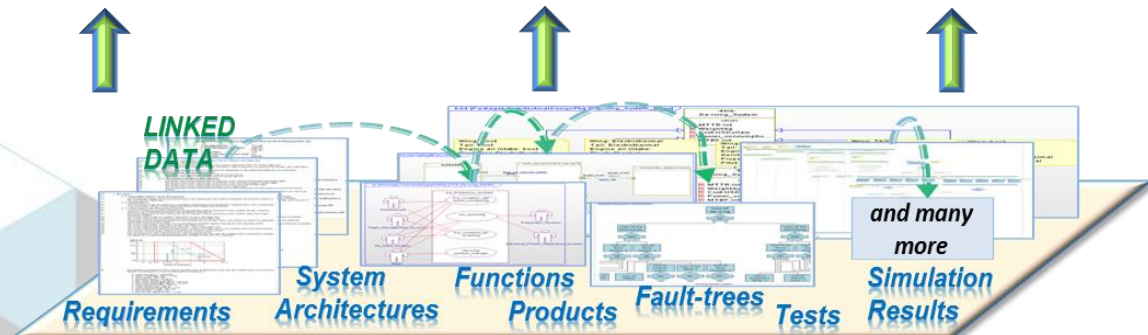


**Enable New Engineering Methods**



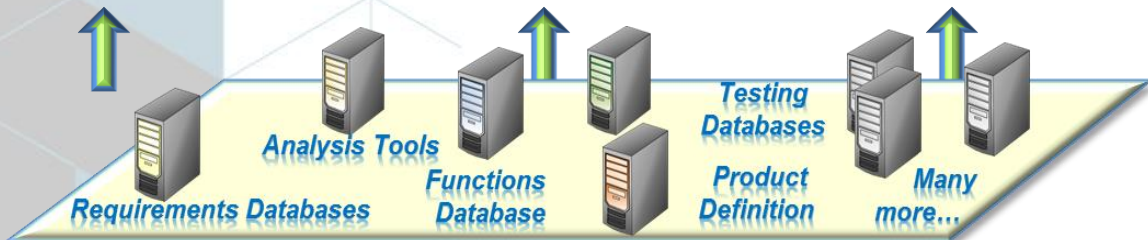
*Users get better ways of working*

**Open Integration Platform**



- **Standardized Interoperability Specification**
- **Connect tools to expose & link data**

**Tool Layer**



# Market Innovation



- ▶ Reduced system development costs due to **smart integration** of tools
- ▶ **Stimulates economy**
- ▶ **Increased flexibility** for OEMs
  - ▷ No vendor-lock-in
- ▶ New **market opportunities** for tool providers
  - ▷ Facilitate innovation and market entry
  - ▷ Great opportunities for SMEs
- ▶ Ensure Europe's leading edge position in development of **safety-critical cyber-physical systems**



# CRYSTAL has the critical mass to generate impact



BE	
NL	
SE	
DE	
CZ	
AT	
IT	
ES	
FR	
UK	

- ▶ **68 partners** from **10 countries**
- ▶ **€82M** budget
- ▶ **European key players** from different industrial domains
- ▶ Large companies developing embedded systems act as **technology users** and case providers
- ▶ Large tool providers, SMEs and researchers as **technology providers**



# Thank you for your attention!

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